

What is claimed is:

1. A roller assembly for guiding and supporting a moveable object within a track comprising:

a sliding chariot adapted to be affixed to a moveable object; and

5 a supporting roller assembly comprising a supporting roller having an aperture through the center thereof, a pin secured at one end to said chariot and extending through the supporting roller aperture, and a bush positioned between said supporting roller and said pin to provide a sliding surface between said supporting roller and said pin.

10 2. The roller assembly of claim 1 wherein the bush is mounted along the radially inner circumference of the supporting roller.

3. The roller assembly of claim 1, wherein the aperture in the supporting roller comprises a middle section defined by a minimum diameter of the supporting roller and two end portions defined by diameters larger than the minimum diameter of the supporting roller.

15 4. The roller assembly of claim 2, wherein at least one end of the bush comprises a flanged section defined by an area of increased outer diameter.

5. The roller assembly of claim 3, wherein both ends of the bush comprise flanged sections defined by areas of increased outer diameter.

20 6. The roller assembly of claim 3, wherein the bush conforms to the shape of the supporting roller aperture including a middle portion having a minimum outside diameter and two end portions each having an outside diameter greater than said minimum diameter of the middle portion.

7. The roller assembly of claim 1 wherein the bush comprises a metal-polymer bearing material.

25 8. The roller assembly of claim 7 wherein the bush comprises a polytetrafluoroethylene based metal-polymer bearing material.

10. The roller assembly of claim 1, further comprising guide means for stabilizing said chariot in a non-vertical direction.

30 11. The roller assembly of claim 1, further comprising guide means for stabilizing said chariot in a horizontal direction.

12. The roller assembly of claim 11, wherein the guide means comprises at least one guide roller rotatably affixed to said chariot to provide a rotating contact between the roller assembly and the guide track.

13. The roller assembly of claim 1, wherein the pin further comprises an area of enlarged diameter on the inboard end which provides lateral support to the roller by abutting the flanged portion of the bush.

14. The roller assembly of claim 1, further comprising a riveted washer affixed to one end of the pin to secure the supporting roller in position on the pin.

15. A roller assembly for guiding and supporting a sliding door mounted to a guide track comprising:

a sliding chariot adapted to be affixed to a sliding door,

a guide roller rotatably mounted to said chariot to rotate when in contact with a horizontal guide surface; and

a supporting roller assembly comprising a supporting roller having an aperture through the center thereof, a pin secured at one end to said chariot and extending through the supporting roller aperture, and a bush positioned between said supporting roller and said pin to provide a sliding surface between said roller and said pin.

16. The roller assembly of claim 15, wherein the aperture in the supporting roller comprises a middle section defined by a minimum diameter of the supporting roller and two end portions defined by diameters larger than the minimum diameter of the supporting roller.

17. The roller assembly of claim 16, wherein the bush conforms to the shape of the supporting roller aperture including a middle portion having a minimum outside diameter and two end portions each having an outside diameter greater than said minimum diameter of the middle portion.

18. The roller assembly of claim 15, wherein the bush comprises a metal-polymer bearing material.